

# Frederick County Energy Conservation and Sustainability Initiatives

# FY'11 Annual Report

to the Board of County Commissioners

October 13, 2011

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## Reporting Progress

- Comprehensive Energy Plan
- Energy Conservation Committee
- Sustainable Action Plan for County Operations



# Why do we have these initiatives?

- Save the county and its taxpayers money through lowered operational costs
- Reduce the consumption of natural resources
- Coordinate and motivate continuous improvements by County Divisions and Agencies
- Meet strategic goals of the BoCC



# Overview: Comprehensive Energy Plan

Defined annual goals to reduce Frederick County Government's non-renewable energy over a 15year period by 50% or more in office buildings, facilities, and vehicle fleet

- 32 total recommendations
- 17 recommendations showing progress during FY2011
- 3.9% of reduction from baseline

COMPREHENSIVE
ENERGY PLAN
FOR FREDERICK
COUNTY,
MARYLAND
-FINAL-



Management Services Division September 2010



Formed in 2005, the ECC provides a forum for employees from many County departments and FCPS to share ideas, promote conservation efforts and learn new strategies for reducing energy use.



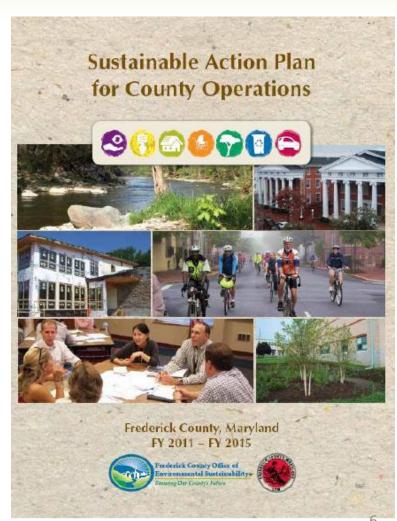
# **Overview: Sustainable Action Plan**

### Goals, Guiding Principles, Action Items & Measures of Success for 7 Program Areas:

- Leading by Example
- Energy & Emissions
- Green Building
- Responsible Purchasing
- Waste & Recycling
- Transportation Alternatives
- Green Infrastructure

#### Follow-up with Team and Lead Agencies

 More than 60 action items in progress or completed!!





### **FY11 Accomplishments:**

- 21 additional building audits conducted (bringing total to 29)
- HVAC efficiency upgrades at Rose Hill Maintenance Shop, Senior Center, Pinecliff A-frame.
- LED lighting retrofits in Courthouse courtrooms and lobby
- Heat reflecting roof at Emmitsburg Community Center



- Fuel conservation
   saved 111,000 gallons =
   10.5% reduction from
   FY2008 baseline
- Reduced expenses \$330,000 from FY08 baseline usage



# Accomplishments: Continued...

- Brunswick Library achieved LEED Silver rating; 4 County employees earned LEED AP certification
- Traffic lights upgraded to LEDs
- County emissions inventory updated
- Provided workshops for County employees to learn about energy conservation and cost savings
- Hosted training on International Green Construction Code
- Developed Food Waste Composting & Digestion recommendations



 Oakdale HS solar PV project installed and operational April 2011- synergy with FCPS



### **Outlook for FY2012:**

- 2 Hybrid Transit buses placed in-service
- Use of heat reflecting TPO in roof replacements
- Highway Operations truck shed lighting retrofit
- Assessment of potential PV solar installation at the Health Department and ADC





### FY2011

On-going Annual Energy Savings
Achieved in Building Projects and
Vehicle Fuel Conservation



\$358,100



### 6-Year Program Results!

Cumulative Savings with Fuel Conservation

\$1.5 million

On-going Annual Savings with Fuel Conservation

\$585,000